

IN THE CLAIMS:

1. (Currently Amended) A method ~~for generating a~~  
~~real time vertically and horizontally downscaled video~~  
~~signal (20) of a video image (11) by an image generating~~  
~~and processing block (12), comprising the steps of:~~

generating (30) a real-time video signal of the video  
image (11) by a camera sensor (14) of the image generating  
and processing block (12),

generating (32) ~~a~~ real-time horizontally downscaled  
video signal (18) using horizontal downscaling of the real-  
time video signal by the camera sensor (14) without using a  
line memory, and

generating (38) ~~the~~ real-time vertically and  
horizontally downscaled video signal (20) using vertical  
downscaling of the real-time horizontally downscaled video  
signal (18) by a processing block (16) of the image  
generating and processing block (12).

2. (Currently Amended) The method of claim 1, before  
~~the step of~~ said generating (38) ~~a~~ the real-time  
vertically and horizontally downscaled video signal (20),  
further comprising the step of:

providing (36) ~~said~~ real-time horizontally downscaled  
video signal (18) from the camera sensor (14) to the  
processing block (16) through a camera compact port (CCP)  
bus (15) of the image generating and processing block (12).

3. (Currently Amended) The method of claim 1, wherein  
the camera sensor (14) has a camera memory (14a).

4. (Currently Amended) The method of claim 1, wherein the processing block ~~(16)~~ has a processing memory ~~(16a)~~.

5. (Currently Amended) The method of claim 1, further comprising ~~the step of~~:

providing ~~(40)~~ the real-time vertically and horizontally downsampled video signal ~~(20)~~ indicative of the video image ~~(11)~~ through an internal bus ~~(25a)~~ to a real-time viewfinder display ~~(22)~~ and displaying said video image ~~(11)~~ on the real-time viewfinder display ~~(22)~~.

6. (Currently Amended) The method of claim 5, wherein the image generating and processing block ~~(12)~~ is a part of a camera-phone mobile device ~~(10)~~.

7. (Original) The method of claim 6, wherein the processing block ~~(16)~~ is a base band ~~(BB)~~ engine of the camera-phone mobile device ~~(10)~~.

8. (Currently Amended) The method of claim 6, further comprising ~~the steps of~~:

encoding ~~(42)~~ the real-time vertically and horizontally downsampled video signal ~~(20)~~ by a video packing block ~~(24)~~ of the image generating and processing block ~~(12)~~, ~~thus~~ for generating an encoded video signal ~~(27)~~, and

providing said encoded video signal ~~(27)~~ through a further internal bus ~~(27a, 27b, 27c)~~ optionally to at

least one of: a file/stream block (28) and to a phone memory (28a) of the camera-phone mobile device (10).

9. (Currently Amended) The method of claim 1, further comprising ~~the step of:~~

encoding ~~(42) the vertically and horizontally downsampled video signal (20) by a video packing block (24) of the image generating and processing block (12), thus~~ for generating an encoded video signal (26).

10. (Currently Amended) An image generating and processing block ~~(12)~~, comprising:

a camera sensor ~~(14)~~, responsive to a video image ~~(11)~~, for generating configured to generate a real-time video signal of the video image (11) and for further configured to generate generating a real-time horizontally downsampled video signal (18) using horizontal downscaling of the real-time video signal without using a line memory by the camera sensor (14); and

a processing block ~~(16)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~, configured to generate for generating a real-time vertically and horizontally downsampled video signal (20) using vertical downscaling of the real-time horizontally downsampled video signal (18).

11. (Currently Amended) The image generating and processing block ~~(12)~~ of claim 10, wherein the camera sensor ~~(14)~~ has comprises a camera memory (14a).

12. (Currently Amended) The image generating and processing block ~~(12)~~ of claim 10, wherein the processing block ~~(16)~~ has comprises a processing memory ~~(16a)~~.

13. (Currently Amended) The image generating and processing block ~~(12)~~ of claim 10, further comprising:

a camera compact port ~~(CCP)~~ bus ~~(15)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~ from the camera sensor ~~(14)~~, ~~for providing~~ configured to provide the real-time horizontally downsampled video signal ~~(18)~~ to the processing block ~~(16)~~.

14. (Currently Amended) A camera-phone mobile device ~~(10)~~, comprising:

an image generating and processing block ~~(12)~~ configured to generate ~~for generating~~ a real-time vertically and horizontally downsampled video signal ~~(20)~~ of a video image ~~(11)~~, and configured to encode ~~for encoding~~ said real-time vertically and horizontally downsampled video signal ~~(20)~~ ~~thus for~~ generating an encoded video signal, wherein said real-time vertically and horizontally downsampled video signal is horizontally downsampled first without using a line memory ~~(27)~~; and

a real-time viewfinder display ~~(22)~~, responsive to the real-time vertically and horizontally downsampled video signal ~~(20)~~, configured to provide ~~for providing~~ a display of the video image ~~(11)~~ ~~indicative by~~ said real-time vertically and horizontally downsampled video signal ~~(20)~~.

15. (Currently Amended) A camera-phone mobile device ~~(10)~~ of claim 14, further comprising:

a file/stream block ~~(28)~~, responsive to the encoded signal ~~(27b, 27e)~~, configured to provide for providing a call connection ~~(28b)~~ to other mobile devices; and

a phone memory ~~(28a)~~, responsive to the encoded signal ~~(27a)~~, configured to provide for providing the encoded signal ~~(27)~~.

16. (Currently Amended) A camera-phone mobile device ~~(10)~~ of claim 14, wherein the image generating and processing block ~~(12)~~, comprising comprises:

a camera sensor ~~(14)~~, responsive to the video image ~~(11)~~, configured to generate for generating the real-time video signal of the video image ~~(11)~~ and for further configured to generate generating a real-time horizontally downsampled video signal ~~(18)~~ using horizontal downscaling of the real-time video signal by the camera sensor ~~(14)~~;

a processing block ~~(16)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~, configured to generate for generating the real-time vertically and horizontally downsampled video signal ~~(20)~~ using vertical downscaling of the real-time horizontally downsampled video signal ~~(18)~~.

17. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, wherein the processing block ~~(16)~~ is a base band ~~(BB)~~ engine of the camera-phone mobile device ~~(10)~~.

18. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, wherein the camera sensor ~~(14)~~ has comprises a camera memory ~~(14a)~~.

19. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, wherein the processing block ~~(16)~~ has comprises a processing memory ~~(16a)~~.

20. (Currently Amended) The camera-phone mobile device ~~(10)~~ of claim 16, further comprising:

a camera compact port ~~(CCP)~~ bus ~~(15)~~, responsive to the real-time horizontally downsampled video signal ~~(18)~~ from the camera sensor ~~(14)~~, configured to provide for ~~providing~~ the real-time horizontally downsampled video signal ~~(18)~~ to the processing block ~~(16)~~.